## **ABSTRACT**

The invention concerns novel means for diagnosing, preventing, compensating, treating an abnormal or unwanted functioning of KAR receptors (*Killer cell Activatory Receptor*), counterparts of non-inhibiting KIR receptors (*Keller cell Inhibitory Receptors*) of the immunoglobulin or lectin type. The invention concerns in particular, novel KARAP (*KAR-Associated Proteins*) polypeptides and their biological applications. A KARAP polypeptide is naturally associated with a KAR receptor, and in the absence of such a KARAP, said KAR receptor is naturally incapable of transducing an activating signal that can be detected. The application also concerns methods for obtaining or identifying such KARAP polypeptides.